Cometary Chip 12

Track 16

Images

Aerogel Cell:
From unknown cell

Aerogel Chip:

Track and Grains:
12A_before_particle_removal.jpg
12A_before_particle_removal3.jpg
12A2_before_particle_removal2.jpg

Microtomed samples:
Grain 1:

FC12,0,16,1_Frag12A2Xlow.pdf

Grain 2:
16,2_Frag12A2Ylow.pdf

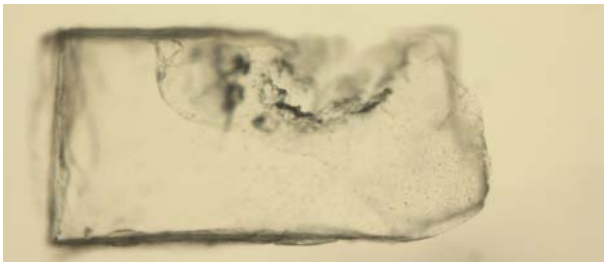
Grain 3:
16,3_Frag12A2Zlow.pdf

Track History:
Chip 12 was found on the surface of the canister upon opening, and has not been tied to a specific cometary cell. Cut by Hope Ishii into two halves; 3 grains (1,2,3) plucked by Mike Zolensky from one half, embedded in epoxy and cut by Keiko Messenger 2/10/06.

Track Characteristics
Type: Cavity with grains along walls
Length: ~300μm

Grain diameter ≤10μm each

Allocation History



Results

Grain 1
Only sample preparation picture.

Grain 2
Only sample preparation pictures.

Grain 3
T. Nakamura: Al, Si and Ti, Si rich particles.

T. Mikouchi (FEGSEM): He examined a potted butt which contains two grains exposed on the surface. One of them is a mostly silica-rich amorphous phase possibly contaminated with aerogel. The other grain (2.5 x 1.5 microns) is made of a K-rich phase, probably a K-feldspar. Neither Ca nor Na was detected. It contains only Si, Al and K. Tried EBSD for this grain, but could not obtain diffraction.

Weisberg (SEM EDS): Sees S and Mg by EDS. Possible K-feldspar.

Data Files: Not available yet

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